

a p-type cladding layer formed of compound semiconductor of AlGaInP system having a larger band gap energy than that of said active layer.

a p-type window layer doped with Zn,

an insertion layer formed of compound semiconductor of AlGaInP system which is inserted into said p-type cladding layer or between said p-type cladding layer and said p-type window layer,

wherein said insertion layer is lattice-matched with said p-type cladding layer, and a composition ratio of Al in said insertion layer is lower than that in said p-type cladding layer and higher than that in said active layer.

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17. A LED of AlGaInP system according to claim 15,

wherein:

said p-type cladding layer is doped with Zn.

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19. An epitaxial wafer for a LED of AlGaInP system, comprising:

a substrate having n-type conductivity,

a n-type cladding layer formed of compound semiconductor of AlGaInP system,

an active layer formed of compound semiconductor of AlGaInP system having a smaller band gap energy than that of said n-type cladding layer,

a p-type cladding layer formed of compound semiconductor of AlGaInP system having a larger band gap energy than that of said active layer,

a p-type window layer doped with Zn, and

an insertion layer formed of compound semiconductor of AlGaInP system which is inserted into said p-type cladding layer

or between said p-type cladding layer and said p-type window layer,

wherein said insertion layer is lattice-matched with said p-type cladding layer, and a composition ratio of Al in said insertion layer is lower than that in said p-type cladding layer and higher than that in said active layer.

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21. An epitaxial wafer for a LED of AlGaInP system

according to claim 19, wherein:

said p-type cladding layer is doped with Zn.

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